

## REMARKS

The rejection of claims 7, 12, and 13 under 35 USC §102(b), and of claims 8 and 9 under 35 USC §103(a) in view of U.S. Patent No. 5,180,964 (Ewing) is respectfully traversed on the grounds that:

- a. The Ewing patent does not disclose that the coil of the induction device is connected between the load and a source of pulsating dc power (Fig. 19A of Ewing, cited by the Examiner, discloses an induction device in the form of a transformer having coils 51 and 52, but neither of the two coils 51 and 52 is connected between the power supply and the load in the manner claimed); and
- b. The circuit disclosed in the Ewing patent does not discharge to the load when the source is cut off (unlike the claimed invention, in which the load charges the a coil of the inductance device when it is on, thereby preventing discharge, and only permits discharge when the load is turned off, Ewing using the transformer or inductance device to isolate the load (col. 23, lines 61-65), which is contrary to the claimed connection between the power supply and the load.

The Ewing patent discloses a DC to DC converter that switches at zero crossings. Fig. 19A of Ewing, cited by the Examiner, does show an induction device that at first glance appears similar to that of the claimed invention. However, the induction device shown in Fig. 19A does not have the same function as the claimed induction device, which is to store or integrate pulses from the power supply, and then to discharge in an opposite direction when the power supply is turned off. Coil 52 shown in Fig. 19A of Ewing cannot perform the claimed function because it is not connected to the load 37. Coil 51 shown in Fig. 19A of Ewing also cannot perform the claimed function because it is not connected to the power supply  $V_{in}$ . Neither of the coils is connected “between the power supply and load” in the manner claimed, and illustrated in each of the Applicant’s drawing figures.

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In the Official Action, the Examiner cites col. 2, lines 10-15 of Ewing as teaching discharge of an induction device to the load. However, this passage discusses the circuit illustrated in Fig. 1 of the Ewing patent, rather than that of Fig. 19A, the equivalent functions of which are illustrated in Figs. 1A to 1I.

The induction device 12 shown in Fig. 1 of the Ewing patent does not discharge upon suspension of the power supply, but to the contrary supplies a linearly increasing voltage to the switch 13A, which has the effect of narrowing the output pulse and thereby boosting the output voltage to achieve the goal of dc to dc conversion. The reason for this non-analogous function is that the induction device of Ewing is on the **source side** of the diode 35 rather than on the **load side** as in each of the embodiments of the present invention.

Therefore, none of the embodiments disclosed in the Ewing patent anticipates, or renders obvious, any of the embodiments of the presently claimed invention, and therefore withdrawal of the rejections of claims 7-9, 12, and 13, under 35 USC §102(b) and 103(a) is respectfully requested.

It is respectfully noted that elected claim 18 has not been rejected, and therefore an indication of allowability is requested.

Having thus overcome each of the rejections made in the Official Action, expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC

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